

**Observation and Testing of Rough Site  
Grading Operations  
Harbor Gateway Development  
Harbor Gateway between  
190<sup>th</sup> and 203<sup>rd</sup> Street  
Los Angeles, California**

**Prepared For:**

**Boeing Realty Corporation  
4060 Lakewood Boulevard  
Long Beach, California 90808-1700**

**Attn: Mr. Johnny Marasco**

**Project Number 5936-96  
June 1, 1999**

# NorCal Engineering

Soils and Geotechnical Consultants

10641 Humbolt Street, Los Alamitos, CA 90720

(562) 799-9469 Fax (562) 799-9459

June 1, 1999

Project Number 5936-96

Boeing Realty Corporation  
4060 Lakewood Boulevard  
Long Beach, California 90808-1700

Attn: Mr. Johnny Marasco

RE: **Observation and Testing of Rough Site Grading Operations –**  
Proposed Harbor Gateway Development - Located at the West of Harbor  
Gateway between 190<sup>th</sup> Street at 203<sup>rd</sup> Street, in the City of Los Angeles,  
California (Legal Description: Tract No. 52172)

Dear Mr. Marasco:

Pursuant to your request, this firm has observed and tested grading and backfill operations at the above referenced project. Results of the compaction tests are attached and locations of these tests are shown on the accompanying Site Plan. All work was performed in accordance with our Geotechnical Investigation dated March 18, 1996, Project Number 5936-96 and all present day standards of the Geotechnical Engineering Industry.

## Site Grading

All vegetation and demolition debris was stripped and removed from the fill area prior to grading operations. The existing low density soils were removed to competent native soils, the exposed subgrade scarified moisture conditioned and then recompacted to a minimum of 90% relative compaction. All excavations were observed and approved by this firm prior to placement of fill material.

Fill soils placed were compacted to a minimum of 90% of the laboratory standard in lifts not in excess of eight inches in thickness. The maximum depth of fill placed was 11½ feet. Conventional earthmoving equipment was utilized for compaction control. A water truck provided moisture control. The approximate limits of compacted fill are indicated on the attached Site Plan.

#### **Laboratory/Field Testing**

The relative compaction was determined by Sand Cone Method (ASTM: D1556-82) and by the Drive Tube Method (ASTM: D2937). The maximum density of the fill soils was obtained by the laboratory standard (ASTM: D1557-91) and results are shown on Table I. Tests were performed a minimum of every 500 cubic yards placed and every two feet in depth of fill placed. Results of field density tests are presented in Table II.

#### **Recommendations**

Development of the site is feasible based upon our observations and testing of grading operations. Prior to development of any portion of the site, a detailed subsurface geotechnical investigation should be undertaken to provide remedial grading and construction recommendations specific to the planned development. Complete building and grading plans should be reviewed by the soils engineer prior to construction.

#### **Conclusions**

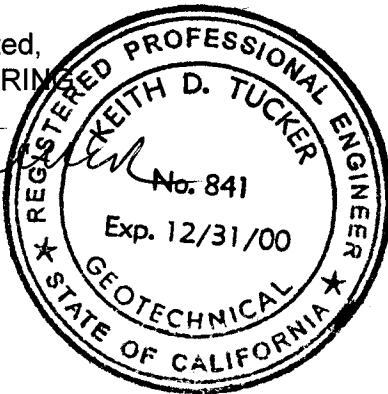
The geotechnical engineering aspects of the grading have been observed and are in compliance with the geotechnical engineer's recommendations. The development has been graded to the approval of this firm and is suitable for its intended use.

We appreciate this opportunity to be of service to you. If you have any further questions, please do not hesitate to contact the undersigned.

Respectfully submitted,  
NORCAL ENGINEERING

*Keith D. Tucker*

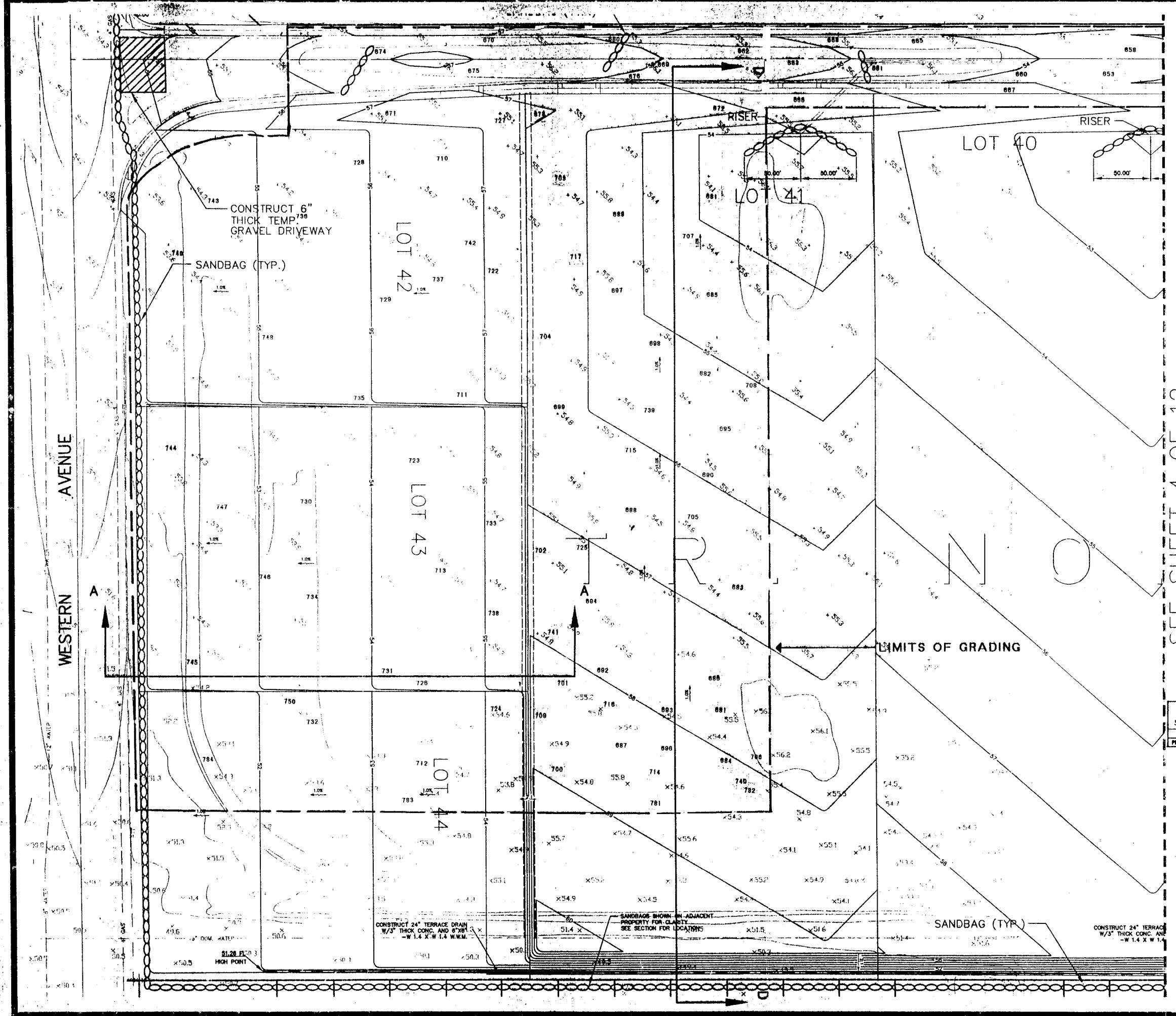
Keith D. Tucker  
Project Engineer  
R.G.E. 841



*Gregory H. Bennett*

Gregory H. Bennett  
Project Manager

NorCal Engineering



NO.	DESCRIPTION	REVISIONS
DATE	BY DATE	CHK

**TAT & ASSOCIATES INC.**  
1100 TOWN & COUNTRY,  
SUITE 1200  
P.O. Box 4429  
Orange, California 92666  
(714) 560-8200  
(714) 560-8211 FAX

**TAT**  
San Diego, CA Concord, CA Sacramento, CA

**TAT**

**GRADING PLAN**  
**PROJECT NO. SP3283**  
**DATE: 04/10/98**  
**CFD. P.C.**  
**REVISION NO:**  
**J.V. TITLE:**

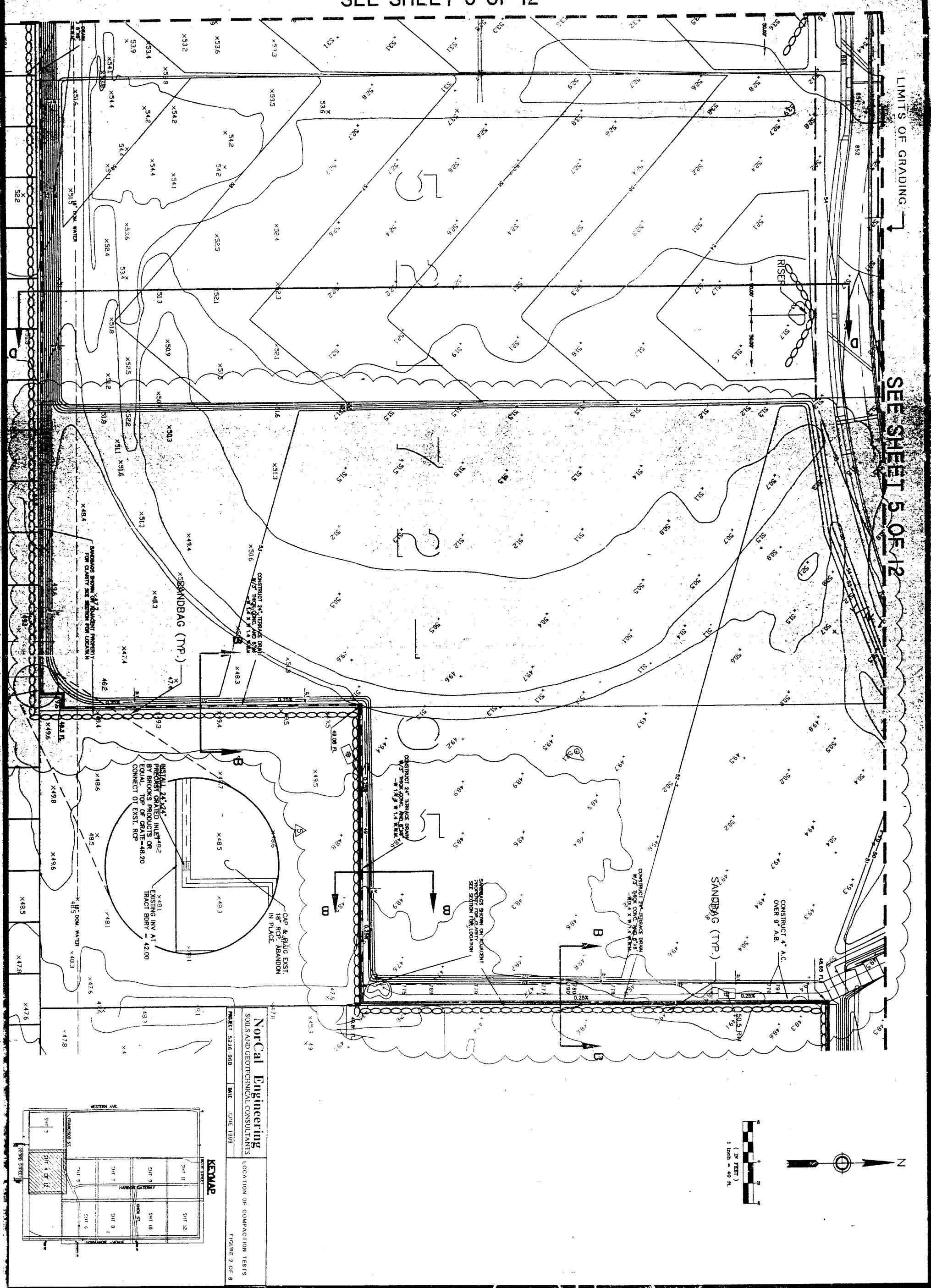
**PROJECT:**  
**DRAWN: J.V.**  
**DATE: 04/10/98**  
**CFD. P.C.**  
**REVISION NO:**  
**JOB NO. SP3283**

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SEE SHEET 3 OF 12

## LIMITS OF GRADING

SEE SHEET 5 OF 12



DRAWN: J.V.	TITLE:
DATE: 06/02/98	
CK'D: P.C.	
DATE:	
REVISION NO: 5	
DATE: 5/18/99	
JOB NO: SR3289	PROJECT

**TITLE:**

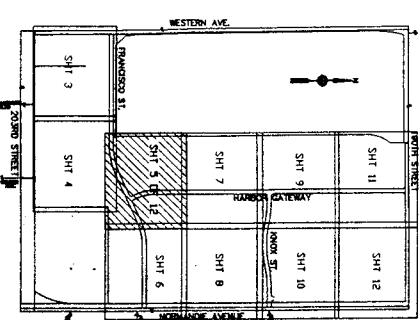
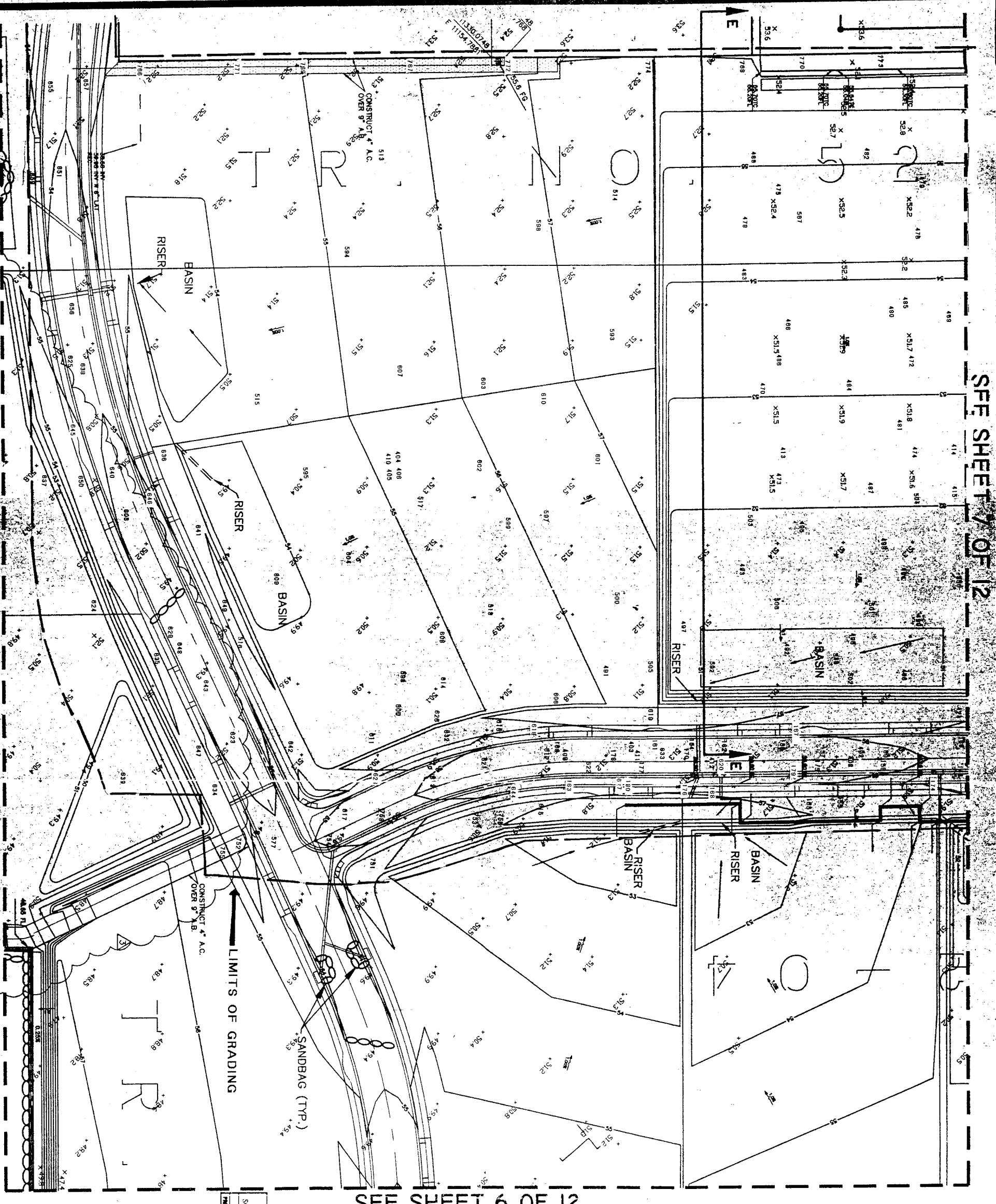
**GRADING PLAN**  
**BOEING REALTY**  
1060 LAKWOOD BLVD., 6TH  
LONG BEACH, CA 90808-1  
**HARBOR GATE**



**TAIT & ASSOCIATES, INC.**  
1100 TOWN & COUNTRY,  
SUITE 1200  
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Orange, California 92868  
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REV. GRADE LOT 13 FOR DWPPS ROAD 10/28/98	JV	PC
ADDED DRAIN INLET	PC	PC
Revised slope at inlet 5/4/99	JV	PC
Revised lots 13 & 14 5/18/99	JV	PC
NO.	DESCRIPTION	BY DATE

SFF SHEET 7 OF 12



NorCal Engineering  
SOIL AND GEOTECHNICAL CONSULTANTS  
PROJECT 5936-968 DATE JUNE 1999  
FIGURE 3 OF 6

GRADING PLAN

BOEING REALTY CO.  
4060 LAKEWOOD BLVD., 6TH FLOOR  
LONG BEACH, CA 90808-1700

HARBOR GATEWAY  
LOS ANGELES, CA



TAIT & ASSOCIATES, INC.  
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P.O. Box 4429  
Orange, California 92868  
(714) 560-8200  
(714) 560-8211 FAX  
Phoenix, AZ

RAISED LOT 2'	REV. GRADE LOT 11 FOR DWP'S ROAD 10/28/98	JV	PC
△	△	PC	PC
△ Rev Lots 13 & 14			
NO.	DESCRIPTION	BY DATE	CHK
	REVISIONS		

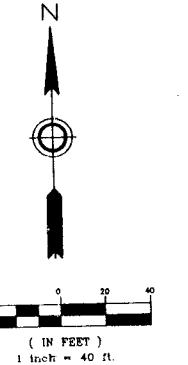
DRAWN: J.V.  
DATE: 06/02/98  
CKD: P.C.  
DATE:  
REVISION NO: 3  
DATE: 5/18/99  
JOB NO: SP3289

TITLE:  
PROJECT:

**SEE SHEET 9 OF 12**

SEE SHEET 5 OF 12

## LIMITS OF GRADING.



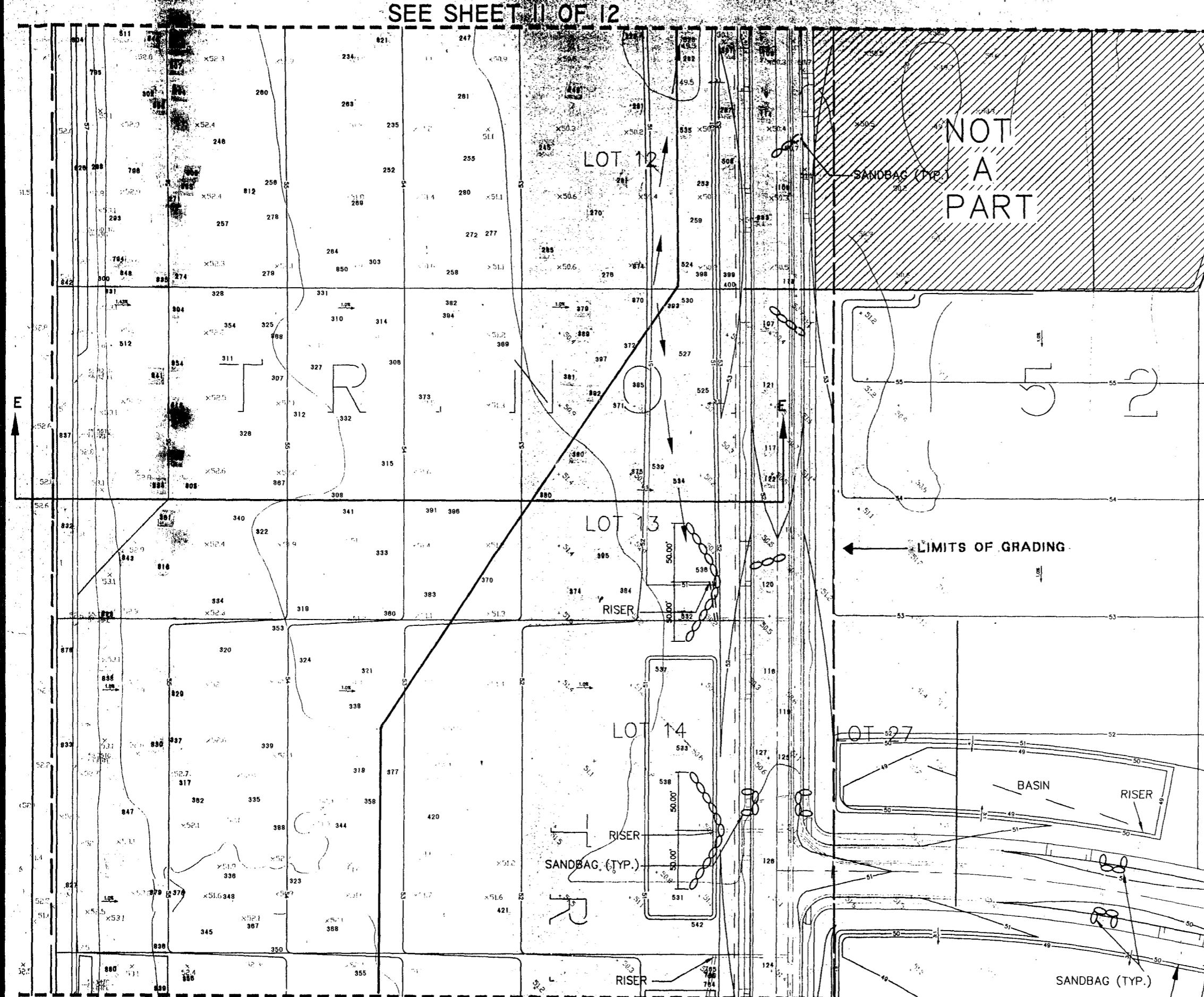
( IN FEET )

1 inch = 40 ft.

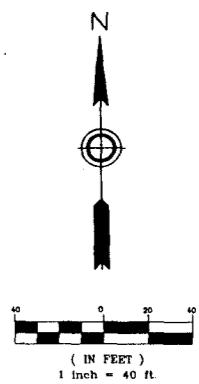
**GRADING PLAN**  
**BOEING REALTY C.**  
6660 LAKEWOOD BLVD., 6TH  
LONG BEACH, CA 90808-17  
**HARBOR GATEW.**  
LOS ANGELES, CA

<b>NorCal Engineering</b> SOILS AND GEOTECHNICAL CONSULTANTS		LOCATION OF COMPACTION TESTS	
PROJECT 5036-988	DATE JUNE 1999		FIGURE 4 OF 6

SEE SHEET 11 OF 12



SEE SHEET 7 OF 12

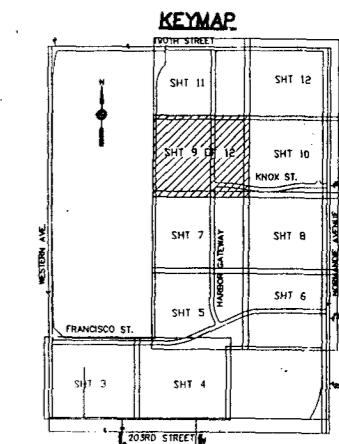


0  
10  
20  
40  
(IN FEET)  
1 Inch = 40 ft

SEE SHEET 10 OF 12

GRADING PLAN		LOCATION OF COMPACTION TESTS
BOEING REALTY CO.	4080 LAKWOOD BLVD. 6TH FLOOR LONG BEACH, CA 90808-1700	FIGURE 5 OF 6

HARBOR GATEWAY  
LOS ANGELES, CA



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Sacramento, CA  
Concord, CA  
San Diego, CA

BOE-C6-0100329  
NO. DESCRIPTION BY DATE CHK  
REVISIONS

DRAWN: J.V.  
DATE: 04/10/98  
CSD: P.C.  
DATE:  
REVISION NO:  
JOB NO: SP3289  
PROJECT:

9 OF 12



**TABLE I**  
**MAXIMUM DENSITY TESTS**  
**(ASTM: D1557-91)**

<u>Sample</u>	<u>Classification</u>	<u>Optimum Moisture</u>	<u>Maximum Dry Density (lbs./cu.ft.)</u>
I	Silty CLAY	14.0	110.0
II	Silty CLAY	13.0	112.0
III	Silty CLAY with gravel	15.0	121.0
IV	Clayey SILT	12.0	121.0
V	Silty, sandy CLAY with gravel	10.5	128.0
VI	Silty, sandy CLAY with occasional gravel	15.0	118.0
VII	Silty CLAY with occasional gravel	13.5	119.0
VIII	Clayey silty SAND	14.0	117.0
IX	Clayey SAND slightly silty with gravel	9.5	127.0
X	Gravelly clayey SAND	9.0	128.0
XI	Clayey silty sandy with occasional gravel	11.0	125.0
XII	Clayey silty sandy with asphalt and gravel	8.5	126.0
XIII	SAND fine to medium grained, clayey, silty with gravel	10.0	126.0
XIV	Silt and Sand with shale fragments	18.0	100.0
XV	SAND fine to medium grained, silty, slightly clayey	17.0	112.0
XVI	SAND fine to medium grained, slightly silty	10.0	125.0
XVII	Silt and Sand with shale fragments	18.0	103.0

**TABLE I**  
**MAXIMUM DENSITY TESTS**  
**(ASTM: D1557-91)**

<u>Sample</u>	<u>Classification</u>	<u>Optimum Moisture</u>	<u>Maximum Dry Density (lbs./cu.ft.)</u>
XVIII	SAND fine to medium grained, slightly silty with occasional gravel	11.0	120.0
XIX	SAND fine to medium grained, silty with shale fragments and occasional gravel	15.0	115.0
XX	Crushed Miscellaneous Base	7.5	130.0

**TABLE II**  
**COMPACTION TEST RESULTS**

Date of Test	Test No.	*Depth	Percent Moisture	Unit Wt. lbs./cu.ft.	Relative Compaction	Soil Type
6/18/98	101	2.5-3.0	12.9	101.9	93	I
6/18/98	102	3.0-3.5	14.9	104.4	93	II
6/19/98	103	2.0-2.5	15.8	107.9	96	II
6/19/98	104	2.0-2.5	18.3	112.4	93	III
6/19/98	105	1.5-2.0	13.9	111.5	92	III
6/19/98	106	1.0-1.5	17.0	113.7	94	III
6/22/98	107	4.0-4.5	14.8	108.0	96	II
6/22/98	108	4.0-4.5	16.1	101.6	92	I
6/22/98	109	3.0-3.5	18.3	109.0	90	III
6/22/98	110	2.5-3.0	18.8	111.9	93	III
6/22/98	111	0.5-1.0	16.7	109.7	91	III
6/22/98	112	0.5-1.0	17.1	111.0	92	III
6/22/98	113	3.0-3.5	18.1	112.6	93	III
6/22/98	114	2.0-2.5	17.0	115.4	95	III
6/22/98	115	1.0-1.5	17.3	115.1	95	III
6/22/98	116	4.0-4.5	15.1	106.6	95	II
6/22/98	117	4.0-4.5	14.3	104.1	93	II
6/22/98	118	3.0-3.5	15.0	112.9	93	IV
6/22/98	119	3.0-3.5	17.0	106.8	88	III
6/22/98	119A**	3.0-3.5	16.7	111.4	92	III
6/23/98	120	1.0-1.5	17.0	109.4	90	III
6/23/98	121	1.0-1.5	17.8	111.2	92	III
6/23/98	122	0.5-1.0	19.6	112.0	93	III
6/23/98	123	0.0-0.5	16.9	113.8	94	III

TABLE II  
COMPACTION TEST RESULTS

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
6/23/98	124	4.0-4.5	16.2	101.5	92	I
6/23/98	125	2.0-2.5	14.1	113.9	94	IV
6/23/98	126	3.0-3.5	13.6	109.2	90	IV
6/23/98	127	1.0-1.5	16.3	113.5	94	III
6/23/98	128	4.0-4.5	13.3	116.4	96	IV
6/23/98	129	3.0-3.5	16.3	115.2	95	IV
6/23/98	130	1.5-2.0	12.0	120.5	94	V
6/23/98	131	0.5-1.0	11.1	117.0	91	V
6/23/98	132	0.5-1.0	15.8	110.5	91	III
6/24/98	133	4.5-5.0	13.1	111.4	92	IV
6/24/98	134	4.0-4.5	13.7	109.9	91	IV
6/24/98	135	3.5-4.0	15.5	110.8	92	III
6/24/98	136	4.0-4.5	13.8	110.7	92	IV
6/24/98	137	2.0-2.5	17.0	106.8	95	II
6/24/98	138	0.0-0.5	14.8	111.5	92	III
6/24/98	139	0.0-0.5	17.2	115.2	95	III
6/24/98	140	3.0-3.5	14.6	110.8	92	III
6/24/98	141	6.0-6.5	13.8	113.3	94	IV
6/24/98	142	2.5-3.0	17.1	109.3	90	III
6/24/98	143	5.0-5.5	12.7	124.2	97	V
6/24/98	144	6.5-7.0	18.3	111.6	92	IV
6/24/98	145	5.5-6.0	12.1	120.4	94	V
6/25/98	146	4.0-4.5	17.5	115.1	95	III
6/25/98	147	3.0-3.5	16.7	109.7	93	VI

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
6/25/98	148	7.0-7.5	16.3	107.5	93	II
6/25/98	149	6.0-6.5	16.8	117.3	97	IV
6/25/98	150	5.5-6.0	15.3	110.1	93	VII
6/25/98	151	4.0-4.5	19.8	100.2	83	II
6/25/98	151A**	4.0-4.5	17.7	110.5	91	II
6/25/98	152	4.0-4.5	16.6	101.2	92	I
6/25/98	153	4.5-5.0	18.0	112.7	96	VI
6/25/98	154	3.5-4.0	11.8	116.3	91	V
6/25/98	155	7.5-8.0	13.9	112.4	93	IV
6/25/98	156	7.0-7.5	12.9	111.6	92	IV
6/26/98	157	5.0-5.5	15.2	111.1	93	VII
6/26/98	158	4.0-4.5	17.0	115.4	95	III
6/26/98	159	2.0-2.5	16.9	108.6	92	VI
6/26/98	160	3.0-3.5	15.4	109.2	92	VII
6/26/98	161	2.0-2.5	18.3	112.4	95	VI
6/26/98	162	8.0-8.5	14.1	112.2	93	IV
6/26/98	163	8.0-8.5	13.3	112.9	93	IV
6/26/98	164	9.0-9.5	14.9	113.1	94	IV
6/26/98	165	5.0-5.5	12.1	117.8	92	V
6/26/98	166	4.0-4.5	14.6	117.8	92	V
6/26/98	167	8.0-8.5	14.5	111.8	92	IV
6/29/98	168	7.0-7.5	14.0	111.4	94	VII
6/29/98	169	7.0-7.5	14.6	109.9	92	VII
6/29/98	170	6.0-6.5	15.2	111.9	94	VII

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
6/29/98	171	2.0-2.5	15.1	105.9	95	II
6/29/98	172	0.5-1.0	14.8	109.8	91	III
6/29/98	173	3.0-3.5	17.0	107.7	91	VI
6/30/98	174	0.5-1.0	16.6	111.5	92	III
6/30/98	175	6.0-6.5	16.7	108.0	92	VI
6/30/98	176	5.0-5.5	17.0	115.4	95	III
6/30/98	177	5.0-5.5	15.3	111.0	93	VII
6/30/98	178	4.0-4.5	18.3	107.3	91	VI
6/30/98	179	4.0-4.5	10.3	106.1	89	VII
6/30/98	179A**	4.0-4.5	12.8	111.7	94	VII
6/30/98	180	5.0-5.5	16.5	107.3	91	VI
7/1/98	181	6.5-7.0	13.4	110.2	94	VIII
7/1/98	182	10.5-11.0	15.2	110.2	94	VIII
7/1/98	183	8.5-9.0	15.8	107.9	91	VI
7/1/98	184	6.5-7.0	14.8	110.6	93	VII
7/1/98	185	3.5-4.0	13.3	112.9	93	IV
7/1/98	186	5.0-5.5	14.1	110.4	93	VII
7/1/98	187	4.0-4.5	16.6	109.8	91	III
7/1/98	188	3.0-3.5	12.2	111.4	94	VII
7/1/98	189	3.0-3.5	11.6	113.8	96	VII
7/1/98	190	3.5-4.0	14.8	106.3	95	II
7/1/98	191	3.5-4.0	13.6	105.6	94	II
7/2/98	192	2.5-3.0	14.2	109.7	92	VII
7/2/98	193	2.5-3.0	14.1	110.2	93	VII

TABLE II  
COMPACTION TEST RESULTS

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
7/2/98	194	2.5-3.0	14.6	111.5	94	VII
7/2/98	195	3.0-3.5	14.9	101.4	91	II
7/2/98	196	3.5-4.0	14.7	102.6	92	II
7/2/98	197	2.5-3.0	14.8	111.6	94	VII
7/2/98	198	2.5-3.0	14.2	110.2	93	VII
7/2/98	199	3.5-4.0	14.8	103.1	92	II
7/2/98	200	3.5-4.0	14.9	102.5	92	II
7/2/98	201	2.5-3.0	14.6	109.3	92	VII
7/2/98	202	2.5-3.0	14.2	109.9	95	VII
7/2/98	203	2.5-3.0	14.9	112.5	95	VII
7/2/98	204	4.0-4.5	14.0	101.7	90	II
7/2/98	205	3.5-4.0	14.2	103.4	92	II
7/2/98	206	4.5-5.0	14.4	102.3	91	II
7/2/98	207	3.0-3.5	14.7	112.2	94	VII
7/2/98	208	3.0-3.5	15.0	113.7	96	VII
7/2/98	209	3.5-4.0	14.5	110.7	93	VII
7/2/98	210	4.0-4.5	14.1	104.6	93	II
7/2/98	211	6.0-6.5	14.4	102.5	92	II
7/6/98	212	3.0-3.5	9.4	118.8	93	V
7/6/98	213	3.0-3.5	12.7	117.1	97	III
7/6/98	214	4.0-4.5	14.4	106.6	95	II
7/6/98	215	4.0-4.5	15.2	105.9	95	II
7/6/98	216	4.0-4.5	15.8	103.6	93	II
7/6/98	217	3.5-4.0	12.7	117.1	92	V

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
7/6/98	218	3.0-3.5	14.5	110.9	93	VII
7/6/98	219	3.0-3.5	15.2	107.6	90	VII
7/6/98	220	3.5-4.0	14.9	103.6	92	II
7/6/98	221	5.0-5.5	15.7	106.3	91	VIII
7/6/98	222	5.0-5.5	17.0	107.7	91	VII
7/6/98	223	2.5-3.0	16.3	110.1	91	III
7/7/98	224	2.0-2.5	15.5	109.1	90	III
7/7/98	225	2.0-2.5	14.2	108.6	91	VII
7/7/98	226	3.0-3.5	12.2	110.5	93	VII
7/7/98	227	2.5-3.0	13.4	114.6	95	III
7/7/98	228	2.5-3.0	11.3	103.3	88	VI
7/7/98	228A**	2.5-3.0	14.7	106.4	90	VI
7/7/98	229	4.0-4.5	15.9	100.1	91	I
7/7/98	230	4.0-4.5	15.0	106.1	95	II
7/7/98	231	4.5-5.0	14.4	104.9	94	II
7/7/98	232	3.5-4.0	16.1	107.7	92	VIII
7/7/98	233	3.0-3.5	16.6	109.8	91	III
7/7/98	234	3.0-3.5	13.7	109.1	90	III
7/7/98	235	3.0-3.5	15.9	107.9	91	VII
7/7/98	236	2.5-3.0	16.4	106.5	90	VI
7/7/98	237	2.5-3.0	14.6	109.1	92	VII
7/8/98	238	2.0-2.5	14.9	104.4	88	VII
7/8/98	238A**	2.0-2.5	14.6	110.8	93	VII
7/8/98	239	2.0-2.5	16.3	109.0	90	III

TABLE II  
COMPACTION TEST RESULTS

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
7/8/98	240	2.0-2.5	11.3	113.2	88	V
7/8/98	240A**	2.0-2.5	10.9	117.2	92	V
7/8/98	241	1.5-2.0	16.3	108.3	92	VI
7/8/98	242	2.0-2.5	13.9	108.9	91	VII
7/8/98	243	2.5-3.0	14.7	111.6	94	VII
7/8/98	244	0.5-1.0	16.6	109.8	93	VI
7/9/98	245	4.0-4.5	14.7	103.7	93	II
7/9/98	246	4.0-4.5	15.2	105.9	95	II
7/9/98	247	2.0-2.5	14.1	118.3	92	V
7/9/98	248	2.0-2.5	15.2	110.2	93	VII
7/9/98	249	1.0-1.5	16.6	108.9	90	III
7/9/98	250	1.0-1.5	15.7	109.8	93	VI
7/9/98	251	1.5-2.0	12.2	113.6	95	VII
7/9/98	252	3.0-3.5	14.2	110.3	93	VII
7/9/98	253	2.5-3.0	16.6	109.8	91	III
7/9/98	254	3.0-3.5	14.0	105.3	94	II
7/9/98	255	2.0-2.5	14.5	111.8	94	VII
7/9/98	256	2.0-2.5	12.7	119.8	94	VI
7/10/98	257	5.0-5.5	14.5	104.8	94	II
7/10/98	258	6.0-6.5	13.8	105.4	94	II
7/10/98	259	5.0-5.5	15.0	103.5	92	II
7/10/98	260	2.0-2.5	11.2	116.9	91	V
7/10/98	261	1.0-1.5	13.9	108.9	91	VII
7/10/98	262	1.5-2.0	15.2	110.2	93	VII

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TABLE II  
COMPACTION TEST RESULTS

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
7/10/98	263	1.5-2.0	16.7	109.7	91	III
7/10/98	264	4.5-5.0	15.5	109.1	90	III
7/10/98	265	0.5-1.0	10.2	118.0	92	V
7/10/98	266	1.0-1.5	16.6	108.9	90	III
7/10/98	267	1.5-2.0	17.0	111.1	92	III
7/10/98	268	0.0-0.5	14.8	111.5	94	VII
7/10/98	269	3.5-4.0	19.7	103.4	86	III
7/10/98	269A**	3.5-4.0	16.7	115.7	96	III
7/10/98	270	3.0-3.5	14.6	110.8	93	VII
7/10/98	271	3.0-3.5	15.4	109.2	92	VII
7/13/98	272	2.5-3.0	15.0	104.4	93	II
7/13/98	273	2.5-3.0	11.1	117.0	91	V
7/13/98	274	1.5-2.0	17.3	112.8	93	III
7/13/98	275	1.5-2.0	17.2	109.2	90	III
7/13/98	276	1.5-2.0	14.2	111.2	93	VII
7/13/98	277	1.0-1.5	15.0	108.7	91	VII
7/13/98	278	1.0-1.5	14.5	110.9	92	IV
7/13/98	279	1.0-1.5	11.2	116.9	91	V
7/13/98	280	0.5-1.0	16.6	109.8	93	VI
7/13/98	281	1.0-1.5	12.8	115.5	96	VII
7/13/98	282	0.5-1.0	15.1	109.5	92	VII
7/13/98	283	0.5-1.0	14.9	111.4	94	VII
7/13/98	284	2.0-2.5	16.9	109.2	90	III
7/13/98	285	1.0-1.5	13.9	110.6	93	VII

TABLE II  
COMPACTION TEST RESULTS

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
7/14/98	286	0.5-1.0	14.4	111.0	92	III
7/14/98	287	1.0-1.5	16.8	110.4	91	III
7/14/98	288	0.5-1.0	15.0	108.7	91	VII
7/14/98	289	1.0-1.5	14.5	112.7	95	VII
7/14/98	290	1.0-1.5	16.3	110.1	92	VII
7/14/98	291	1.5-2.0	15.5	109.1	90	III
7/14/98	292	1.0-1.5	16.3	114.4	95	III
7/14/98	293	7.0-7.5	15.8	109.7	94	VIII
7/14/98	294	8.0-8.5	15.0	109.6	94	VIII
7/14/98	295	6.0-6.5	16.1	107.7	92	VIII
7/14/98	296	10.0-10.5	14.2	105.1	94	II
7/14/98	297	10.0-10.5	13.8	107.2	96	II
7/15/98	298	6.0-6.5	19.6	111.2	95	VIII
7/15/98	299	6.5-7.0	14.2	105.1	93	VII
7/15/98	300	5.0-5.5	15.5	105.6	94	II
7/15/98	301	5.0-5.5	16.7	108.9	90	III
7/15/98	302	4.5-5.0	14.6	111.6	92	IV
7/16/98	303	0.5-1.0	11.3	116.8	91	V
7/16/98	304	6.0-6.5	14.1	109.6	91	IV
7/16/98	305	6.0-6.5	13.8	112.5	93	IV
7/16/98	306	6.0-6.5	13.6	111.8	92	IV
7/16/98	307	6.5-7.0	13.0	111.5	92	IV
7/16/98	308	5.5-6.0	14.5	110.0	92	VII
7/16/98	309	1.0-1.5	16.6	108.1	92	VI

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
7/16/98	310	5.0-5.5	13.8	110.7	92	IV
7/16/98	311	5.0-5.5	13.5	114.5	95	IV
7/16/98	312	4.0-4.5	16.3	104.9	94	II
7/16/98	313	4.0-4.5	15.0	103.4	92	II
7/16/98	314	3.5-4.0	14.9	104.3	93	II
7/16/98	315	4.0-4.5	14.5	115.3	95	III
7/17/98	316	5.0-5.5	16.1	102.5	93	I
7/17/98	317	5.0-5.5	15.5	104.3	93	IV
7/17/98	318	5.0-5.5	14.9	102.1	91	II
7/17/98	319	5.0-5.5	17.3	111.7	92	IV
7/20/98	320	3.5-4.0	17.2	108.4	92	VI
7/20/98	321	3.5-4.0	17.0	113.3	94	III
7/20/98	322	3.0-3.5	25.3	98.9	88	II
7/20/98	322A**	3.0-3.5	15.1	111.2	93	VII
7/20/98	323	2.5-3.0	17.0	115.4	95	III
7/20/98	324	2.5-3.0	14.8	109.8	92	VII
7/20/98	325	2.0-2.5	16.6	108.1	91	VII
7/20/98	326	2.0-2.5	17.0	107.7	91	VI
7/20/98	327	1.5-2.0	14.4	110.1	93	VII
7/20/98	328	1.5-2.0	15.0	106.1	95	II
7/20/98	329	2.0-2.5	13.3	111.2	92	IV
7/21/98	330	1.0-1.5	14.9	109.7	92	VII
7/21/98	331	1.0-1.5	15.1	104.3	93	II
7/21/98	332	0.5-1.0	15.5	110.8	93	VII

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
7/21/98	333	2.5-3.0	17.1	110.2	91	III
7/21/98	334	3.0-3.5	16.8	110.4	91	III
7/21/98	335	2.0-2.5	17.5	113.2	96	VI
7/21/98	336	2.5-3.0	15.4	111.8	94	VII
7/21/98	337	2.0-2.5	18.8	110.3	91	III
7/21/98	338	1.5-2.0	15.3	111.0	93	VII
7/21/98	339	1.0-1.5	14.9	109.7	92	VII
7/21/98	340	1.5-2.0	17.8	109.5	92	VII
7/21/98	341	1.0-1.5	17.2	110.1	91	III
7/22/98	342	7.0-7.5	16.8	104.4	93	II
7/22/98	343	4.0-4.5	15.0	104.3	93	II
7/22/98	344	6.5-7.0	14.2	109.5	90	IV
7/22/98	345	6.0-6.5	14.9	104.4	93	II
7/22/98	346	6.0-6.5	16.5	112.4	93	III
7/22/98	347	6.0-6.5	15.2	109.3	92	VII
7/22/98	348	5.0-5.5	15.5	108.2	91	VII
7/22/98	349	5.0-5.5	17.0	110.2	93	VI
7/22/98	350	4.0-4.5	15.1	112.1	94	VII
7/22/98	351	4.0-4.5	14.0	110.5	91	IV
7/22/98	352	3.0-3.5	16.9	110.4	91	III
7/22/98	353	0.5-1.0	16.6	113.2	94	III
7/22/98	354	0.5-1.0	17.2	107.5	91	VI
7/23/98	355	3.0-3.5	14.6	111.7	94	VII
7/23/98	356	3.5-4.0	12.7	118.0	92	V

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
7/23/98	357	3.0-3.5	16.6	106.3	90	VI
7/23/98	358	3.0-3.5	14.9	111.4	94	VII
7/23/98	359	2.5-3.0	16.9	110.4	91	III
7/23/98	360	0.5-1.0	17.2	110.1	91	III
7/23/98	361	1.0-1.5	15.1	112.1	94	VII
7/23/98	362	0.5-1.0	15.0	114.8	96	VII
7/23/98	363	2.5-3.0	16.9	111.2	92	III
7/23/98	364	2.5-3.0	15.1	111.2	93	VII
7/23/98	365	2.0-2.5	12.2	117.6	92	V
7/23/98	366	2.0-2.5	17.1	110.2	91	III
7/23/98	367	1.0-1.5	15.4	111.8	94	VII
7/23/98	368	1.5-2.0	15.3	114.5	95	III
7/23/98	369	4.0-4.5	15.5	103.9	93	II
7/23/98	370	4.5-5.0	14.8	104.5	93	II
7/23/98	371	4.0-4.5	16.0	103.4	94	I
7/23/98	372	5.0-5.5	15.0	104.4	93	II
7/24/98	373	3.5-4.0	15.8	107.1	96	II
7/24/98	374	3.5-4.0	13.4	118.2	92	V
7/24/98	375	1.5-2.0	25.3	100.6	83	III
7/24/98	375A**	1.5-2.0	16.7	109.7	91	III
7/24/98	376	1.0-1.5	15.2	111.9	94	VII
7/24/98	377	1.0-1.5	14.4	112.3	94	VII
7/24/98	378	1.0-1.5	16.8	113.0	96	VI
7/24/98	379	3.0-3.5	17.0	111.1	92	III

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
7/24/98	380	2.5-3.0	14.9	113.1	95	VII
7/24/98	381	2.0-2.5	15.2	111.1	93	VII
7/24/98	382	2.5-3.0	15.8	103.6	93	II
7/24/98	383	2.0-2.5	14.9	111.4	94	VII
7/24/98	384	2.0-2.5	17.0	110.3	91	III
7/24/98	385	3.0-3.5	14.6	109.9	92	VII
7/27/98	386	0.5-1.0	16.7	110.5	91	III
7/27/98	387	0.5-1.0	17.2	112.6	93	III
7/27/98	388	0.5-1.0	11.9	116.2	91	V
7/27/98	389	2.0-2.5	15.1	109.5	92	VII
7/27/98	390	1.5-2.0	15.4	112.6	95	VII
7/27/98	391	1.5-2.0	18.3	111.6	92	III
7/27/98	392	2.0-2.5	16.6	109.8	91	III
7/27/98	393	2.5-3.0	15.8	113.9	94	IV
7/27/98	394	1.0-1.5	17.2	112.7	93	III
7/27/98	395	1.5-2.0	16.8	110.4	91	III
7/27/98	396	1.0-1.5	15.2	111.1	93	VII
7/27/98	397	1.0-1.5	16.5	108.2	92	VI
7/27/98	398	10.0-10.5	13.3	111.2	92	IV
7/27/98	399	8.0-8.5	14.7	108.9	92	VII
7/27/98	400	6.0-6.5	15.4	109.2	92	VII
7/28/98	401	1.0-1.5	12.0	118.6	93	V
7/28/98	402	2.5-3.0	11.7	119.9	94	V
7/28/98	403	3.0-3.5	11.9	120.1	94	V

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
7/28/98	404	10.0-10.5	13.2	108.6	93	VIII
7/28/98	405	8.0-8.5	16.1	110.7	94	VI
7/28/98	406	6.0-6.5	17.0	111.4	94	VI
7/28/98	407	0.5-1.0	11.2	118.7	93	V
7/28/98	408	3.0-3.5	18.3	111.6	92	III
7/28/98	409	4.0-4.5	15.1	111.2	93	VII
7/28/98	410	5.0-5.5	16.3	110.0	94	VIII
7/28/98	411	3.0-3.5	14.8	104.5	93	II
7/28/98	412	2.0-2.5	17.1	109.3	93	VI
7/29/98	413	8.0-8.5	20.9	99.3	84	VI
7/29/98	413A**	8.0-8.5	12.7	110.6	94	VI
7/29/98	414	7.0-7.5	16.1	108.5	93	VIII
7/29/98	415	7.0-7.5	15.8	107.1	92	VIII
7/31/98	416	6.0-6.5	15.2	107.6	92	VIII
7/31/98	417	6.0-6.5	14.9	109.7	94	VIII
7/31/98	418	5.5-6.0	13.7	112.6	93	IV
7/31/98	419	5.0-5.5	17.0	113.7	94	III
7/31/98	420	5.0-5.5	15.8	108.8	93	VIII
7/31/98	421	4.5-5.0	16.7	111.4	95	VIII
8/3/98	422	8.0-8.5	15.2	109.3	93	VIII
8/3/98	423	8.0-8.5	16.0	107.8	92	VIII
8/3/98	424	7.5-8.0	15.9	110.4	94	VIII
8/3/98	425	7.5-8.0	18.5	112.2	96	VIII
8/3/98	426	6.5-7.0	15.3	109.3	93	VI

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
8/3/98	427	6.0-6.5	14.8	109.8	92	VII
8/3/98	428	8.5-9.0	15.8	107.1	92	VIII
8/3/98	429	8.0-8.5	16.3	109.2	93	VIII
8/3/98	430	7.5-8.0	16.6	109.8	94	VIII
8/3/98	431	4.0-4.5	15.1	107.7	96	II
8/4/98	432	6.0-6.5	13.1	114.9	95	III
8/4/98	433	6.0-6.5	12.9	116.0	96	III
8/4/98	434	6.5-7.0	16.4	109.1	92	VI
8/4/98	435	6.0-6.5	14.9	111.4	94	VI
8/4/98	436	6.0-6.5	13.2	106.0	91	VIII
8/4/98	437	7.0-7.5	15.0	106.1	91	VIII
8/4/98	438	6.0-6.5	14.3	105.9	91	VIII
8/4/98	439	1.0-1.5	8.9	120.3	94	V
8/4/98	440	1.0-1.5	14.8	108.9	90	III
8/4/98	441	1.0-1.5	12.4	113.9	94	IV
8/5/98	442	4.0-4.5	14.8	106.3	90	VI
8/5/98	443	4.0-4.5	12.9	109.8	93	VI
8/5/98	444	6.5-7.0	11.8	111.8	92	IV
8/5/98	445	6.5-7.0	13.1	102.6	92	II
8/5/98	446	9.0-9.5	14.6	106.5	91	VIII
8/5/98	447	0.5-1.0	17.3	110.7	94	VI
8/5/98	448	4.0-4.5	11.7	117.8	92	IV
8/5/98	449	4.0-4.5	10.6	117.5	92	V
8/5/98	450	5.0-5.5	14.6	109.9	91	III

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
8/5/98	451	7.0-7.5	13.4	107.6	90	VII
8/6/98	452	5.0-5.5	17.0	112.8	96	VI
8/6/98	453	5.0-5.5	11.3	115.9	91	V
8/6/98	454	5.0-5.5	9.8	114.8	95	IV
8/6/98	455	5.5-6.0	11.6	110.2	94	VIII
8/6/98	456	7.0-7.5	12.6	104.8	94	II
8/6/98	457	6.0-6.5	10.8	109.2	90	IV
8/6/98	458	2.0-2.5	11.6	112.9	96	VI
8/6/98	459	2.0-2.5	13.8	111.6	95	?
8/6/98	460	4.0-4.5	8.0	116.7	91	?
8/7/98	461	6.0-6.5	15.5	107.4	92	?
8/7/98	462	6.0-6.5	16.1	108.5	93	?
8/7/98	463	5.0-5.5	15.8	107.9	92	?
8/7/98	464	4.0-4.5	15.8	114.9	95	?
8/7/98	465	6.0-6.5	15.9	106.9	91	VII
8/7/98	466	5.0-5.5	15.0	106.1	95	?
8/7/98	467	5.0-5.5	16.6	108.1	92	VI
8/7/98	468	4.5-5.0	14.2	109.5	92	VII
8/7/98	469	4.0-4.5	15.8	105.4	88	VII
8/7/98	469A**	4.0-4.5	14.7	109.9	92	VII
8/7/98	470	3.5-4.0	16.2	110.2	91	III
8/7/98	471	5.0-5.5	15.8	108.8	91	VII
8/10/98	472	3.0-3.5	14.3	110.2	93	VII
8/10/98	473	4.0-4.5	15.0	106.8	95	II

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
8/10/98	474	3.5-1.0	14.8	104.5	93	II
8/10/98	475	5.0-5.5	16.6	109.8	94	VIII
8/10/98	476	5.0-5.5	15.5	103.9	94	I
8/10/98	477	4.5-5.0	15.8	104.4	93	II
8/10/98	478	3.5-4.0	14.6	116.1	96	III
8/10/98	479	3.0-3.5	17.2	115.2	95	III
8/10/98	480	2.5-3.0	15.1	113.9	94	III
8/10/98	481	2.5-3.0	15.2	110.2	93	VII
8/11/98	482	2.5-3.0	16.6	108.9	92	VI
8/11/98	483	3.0-3.5	15.1	111.2	93	VII
8/11/98	484	3.0-3.5	16.0	110.3	91	III
8/11/98	485	2.0-2.5	15.7	108.0	92	VI
8/11/98	486	2.5-3.0	9.4	118.8	93	V
8/11/98	487	3.0-3.5	15.9	110.4	94	VIII
8/11/98	488	4.0-4.5	13.3	110.3	91	IV
8/11/98	489	2.0-2.5	15.5	115.2	95	IV
8/11/98	490	6.5-7.0	18.3	109.9	94	VIII
8/11/98	491	6.0-6.5	16.7	109.7	94	VIII
8/11/98	492	7.5-8.0	13.8	110.7	92	?
8/11/98	493	4.0-4.5	15.8	110.5	94	?
8/11/98	494	4.5-5.0	15.5	107.4	92	?
8/11/98	495	4.0-4.5	13.0	111.5	92	?
8/12/98	496	6.0-6.5	14.2	111.2	93	VII
8/12/98	497	5.0-5.5	19.7	103.6	88	VI

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
8/12/98	497A**	5.0-5.5	16.7	108.8	92	VI
8/12/98	498	4.5-5.0	15.2	109.3	93	VIII
8/12/98	499	5.5-6.0	13.9	109.5	92	VII
8/12/98	500	4.5-5.0	16.8	107.0	91	VIII
8/12/98	501	3.5-4.0	17.2	109.2	90	III
8/12/98	502	4.0-4.5	16.7	111.4	92	III
8/12/98	503	3.0-3.5	16.9	110.4	91	III
8/12/98	504	2.5-3.0	17.2	110.0	91	III
8/12/98	505	4.5-5.0	15.2	111.1	93	VII
8/12/98	506	3.0-3.5	14.3	110.2	94	VIII
8/20/98	507	5.0-5.5	10.2	116.2	91	IX
8/20/98	508	4.0-4.5	10.9	114.5	90	IX
8/21/98	509	4.0-4.5	9.9	114.6	90	IX
8/21/98	510	3.0-3.5	11.3	116.8	92	IX
8/25/98	511	5.0-5.5	9.7	116.7	91	X
8/25/98	512	5.0-5.5	8.9	118.5	93	X
9/1/98	513	4.0-4.5	12.8	109.9	94	VIII
9/1/98	514	4.0-4.5	14.6	107.3	92	VIII
9/1/98	515	5.0-5.5	15.8	107.9	92	VIII
9/1/98	516	5.0-5.5	13.6	107.4	92	VIII
9/1/98	517	7.0-7.5	16.1	110.2	94	VIII
9/1/98	518	6.0-6.5	12.9	106.3	91	VIII
9/2/98	519	3.0-3.5	10.7	112.9	93	IV
9/2/98	520	3.0-3.5	12.2	112.3	93	IV

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
9/2/98	521	2.0-2.5	12.8	106.4	88	III
9/2/98	521A**	2.0-2.5	12.5	111.1	93	VII
9/2/98	522	1.0-1.5	15.8	108.8	92	VI
9/2/98	523	0.5-1.0	15.3	109.3	93	VI
9/3/98	524	4.0-4.5	12.2	112.3	94	VII
9/3/98	525	3.0-3.5	18.3	112.4	94	VII
9/3/98	526	3.0-3.5	14.3	113.7	94	III
9/3/98	527	2.0-2.5	13.3	110.3	91	IV
9/3/98	528	0.5-1.0	15.4	112.7	95	VII
9/3/98	529	0.5-1.0	17.2	115.2	95	III
9/3/98	530	2.5-3.0	10.2	114.3	94	III
9/3/98	531	4.0-4.5	13.2	113.1	96	VI
9/3/98	532	2.0-2.5	14.8	114.9	95	III
9/3/98	533	3.0-3.5	16.6	108.1	92	VI
9/4/98	534	1.5-2.0	15.3	111.9	92	III
9/4/98	535	1.0-1.5	13.3	110.3	91	IV
9/4/98	536	0.5-1.0	12.3	113.9	91	XI
9/4/98	537	1.5-2.0	12.5	112.9	90	XI
9/8/98	538	1.5-2.0	15.2	111.1	93	VII
9/8/98	539	0.5-1.0	14.6	107.9	91	III
9/8/98	540	0.0-0.5	14.8	109.5	92	VII
9/8/98	541	0.5-1.0	11.6	112.0	93	IV
9/8/98	542	3.0-3.5	9.3	116.2	91	V
9/8/98	543	1.0-1.5	16.6	108.1	92	VI

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
9/9/98	544	4.0-4.5	12.6	111.9	94	VII
9/9/98	545	4.0-4.5	12.9	111.6	94	VII
9/9/98	546	4.0-4.5	12.7	115.2	92	XI
9/9/98	547	3.5-4.0	12.3	113.9	91	XI
9/9/98	548	3.0-3.5	14.8	109.1	90	III
9/9/98	549	3.0-3.5	14.6	116.1	96	III
9/9/98	550	3.5-4.0	12.4	113.9	91	XI
9/9/98	551	3.0-3.5	10.8	113.7	91	XI
9/9/98	552	3.0-3.5	10.7	121.9	95	V
9/9/98	553	2.5-3.0	13.7	109.1	92	VI
9/10/98	554	3.0-3.5	14.6	104.7	93	II
9/10/98	555	2.5-3.0	6.7	111.5	89	XI
9/10/98	555A**	2.5-3.0	10.3	116.9	94	XI
9/10/98	556	2.5-3.0	9.7	115.8	90	V
9/10/98	557	2.0-2.5	12.3	114.9	92	XI
9/10/98	558	2.0-2.5	13.4	111.1	93	VII
9/10/98	559	2.0-2.5	17.1	109.3	90	III
9/10/98	560	2.0-2.5	14.8	104.5	93	II
9/10/98	561	1.5-2.0	16.9	107.8	91	VI
9/11/98	562	1.5-2.0	13.4	110.2	93	VI
9/11/98	563	1.0-1.5	10.7	110.7	96	V
9/11/98	564	1.0-1.5	13.5	112.7	93	III
9/11/98	565	1.0-1.5	12.5	117.8	94	XI
9/11/98	566	1.0-1.5	11.9	112.5	93	IV

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
9/11/98	567	1.0-1.5	10.4	118.5	95	XI
9/14/98	568	4.0-4.5	13.6	115.2	95	IV
9/14/98	569	5.0-5.5	10.3	120.0	94	V
9/14/98	570	4.0-4.5	12.8	113.8	94	IV
9/14/98	571	4.0-4.5	11.4	118.5	93	V
9/14/98	572	3.5-4.0	16.5	115.9	91	V
9/14/98	573	5.5-6.0	15.8	111.2	94	IV
9/14/98	574	4.5-5.0	14.2	110.1	93	IV
9/14/98	575	3.5-4.0	19.8	108.5	92	VI
9/15/98	576	3.0-3.5	18.3	109.9	91	III
9/15/98	577	3.0-3.5	14.5	115.3	95	IV
9/15/98	578	4.0-4.5	17.0	112.0	93	III
9/15/98	579	6.0-6.5	15.5	108.2	92	VIII
9/15/98	580	6.0-6.5	17.0	112.8	96	VIII
9/15/98	581	6.0-6.5	12.2	112.8	93	III
9/15/98	582	3.5-4.0	15.8	114.0	94	IV
9/15/98	583	4.5-5.0	13.6	100.4	91	I
9/15/98	584	4.0-4.5	14.5	108.1	92	VIII
9/16/98	585	5.0-5.5	19.7	102.8	80	V
9/16/98	585A**	5.0-5.5	12.0	116.1	91	V
9/16/98	586	3.5-4.0	12.7	113.8	91	XI
9/16/98	587	3.0-3.5	14.1	110.4	93	VII
9/16/98	588	2.5-3.0	14.2	109.5	92	VII
9/16/98	589	3.5-4.0	15.8	110.7	93	VII

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
9/16/98	590	4.0-4.5	16.6	108.1	91	VII
9/16/98	591	3.0-3.5	12.2	115.9	93	XI
9/17/98	592	5.0-5.5	16.0	106.0	91	VIII
9/17/98	593	4.0-4.5	15.8	107.9	92	VIII
9/17/98	594	4.0-4.5	16.7	109.7	91	III
9/17/98	595	3.5-4.0	14.7	106.4	90	VI
9/17/98	596	3.0-3.5	12.3	115.8	93	XI
9/18/98	597	7.0-7.5	10.6	114.8	92	XI
9/18/98	598	6.0-6.5	16.2	107.6	91	VI
9/18/98	599	5.5-6.0	7.8	115.9	92	XII
9/18/98	600	4.5-5.0	16.9	109.5	93	VI
9/18/98	601	7.0-7.5	15.1	108.6	93	VIII
9/18/98	602	6.0-6.5	15.8	116.6	96	III
9/18/98	603	5.0-5.5	9.1	118.2	94	XII
9/18/98	604	5.0-5.5	10.7	113.8	91	XI
9/18/98	605	3.5-4.0	13.4	112.7	93	III
9/18/98	606	7.0-7.5	16.1	107.7	92	VIII
9/21/98	607	4.0-4.5	14.2	110.3	93	VII
9/21/98	608	3.0-3.5	13.2	108.6	91	VII
9/21/98	609	3.0-3.5	17.1	107.6	91	VI
9/21/98	610	2.5-3.0	12.5	113.8	91	XI
9/23/98	611	9.0-9.5	13.8	114.2	94	IV
9/23/98	612	9.0-9.5	13.5	110.1	91	IV
9/23/98	613	8.0-8.5	17.0	111.1	92	III

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
9/23/98	614	4.0-4.5	15.9	103.5	87	VII
9/23/98	614A**	4.0-4.5	14.8	111.5	94	VII
9/23/98	615	8.5-9.0	17.2	109.2	90	III
9/23/98	616	8.0-8.5	15.8	113.9	94	III
9/23/98	617	7.0-7.5	12.7	116.6	93	XI
9/23/98	618	7.0-7.5	14.5	110.0	92	VII
9/23/98	619	3.0-3.5	9.6	118.6	93	V
9/23/98	620	2.0-2.5	17.5	108.9	92	VI
9/23/98	621	6.0-6.5	9.2	117.2	93	XII
9/23/98	622	4.5-5.0	9.6	115.9	92	XII
9/24/98	623	9.0-9.5	13.7	107.2	92	VIII
9/24/98	624	6.0-6.5	16.0	108.6	93	VIII
6/24/98	625	5.0-5.5	15.5	108.2	93	VIII
6/24/98	626	4.0-4.5	14.2	108.6	91	VII
6/24/98	627	2.0-2.5	14.6	111.7	94	VII
6/24/98	628	3.0-3.5	14.7	108.1	92	VI
9/24/98	629	6.0-6.5	9.6	104.9	88	VI
9/24/98	629A**	6.0-6.5	12.9	112.5	93	IV
9/24/98	630	5.0-5.5	12.3	115.8	93	XI
9/24/98	631	2.0-2.5	16.6	109.6	91	III
9/25/98	632	1.0-1.5	17.1	107.6	91	VI
9/25/98	633	1.0-1.5	12.6	113.7	91	XI
9/25/98	634	4.5-5.0	11.1	117.0	91	V
9/25/98	635	3.5-4.0	14.2	109.5	92	VII

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
9/25/98	636	5.0-5.5	15.5	109.1	92	VI
9/25/98	637	4.0-4.5	13.3	111.2	92	IV
9/25/98	638	4.0-4.5	13.9	112.4	93	IV
9/25/98	639	4.5-5.0	15.3	109.3	93	VI
9/25/98	640	3.0-3.5	9.2	120.9	96	XII
9/25/98	641	3.0-3.5	17.1	106.7	90	VI
9/25/98	642	2.5-3.0	7.8	117.8	94	XII
9/25/98	643	2.5-3.0	12.5	113.8	91	XI
9/25/98	644	1.0-1.5	16.8	107.9	89	III
9/25/98	644A**	1.0-1.5	16.6	109.8	91	III
9/28/98	645	3.5-4.0	9.9	114.5	91	XII
9/28/98	646	3.0-3.5	15.1	109.4	92	VII
9/28/98	647	0.5-1.0	14.7	110.7	93	VII
9/28/98	648	1.0-1.5	17.0	106.7	90	VI
9/28/98	649	1.5-2.0	12.2	115.9	93	XI
9/28/98	650	2.0-2.5	12.1	119.5	93	V
9/28/98	651	5.0-5.5	15.8	113.9	97	VIII
9/28/98	652	5.0-5.5	14.6	109.9	94	VIII
9/28/98	653	4.5-5.0	14.5	109.2	93	VIII
9/28/98	654	4.0-4.5	17.8	110.4	91	III
9/28/98	655	3.0-3.5	16.8	109.6	91	III
9/28/98	656	2.5-3.0	17.5	113.2	94	III
9/28/98	657	2.0-2.5	14.8	109.8	92	VII
9/28/98	658	1.0-1.5	12.8	115.6	92	XI

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
9/28/98	659	1.0-1.5	17.1	110.2	91	III
9/29/98	660	4.5-5.0	15.8	107.9	92	VIII
9/29/98	661	4.5-5.0	16.0	106.5	94	VIII
9/29/98	662	4.0-4.5	14.6	108.2	92	VIII
9/29/98	663	0.5-1.0	16.2	109.3	90	III
9/29/98	664	0.5-1.0	15.8	106.2	90	VI
6/29/98	665	3.0-3.5	14.2	113.8	96	VII
6/29/98	666	3.0-3.5	15.2	109.3	92	VII
9/29/98	667	2.0-2.5	17.0	112.8	93	III
9/29/98	668	2.0-2.5	12.3	115.8	93	XI
9/30/98	669	4.5-5.0	16.1	107.7	92	VIII
9/30/98	670	4.0-4.5	15.7	108.9	93	VIII
9/30/98	671	4.5-5.0	16.0	108.6	93	VIII
9/30/98	672	3.0-3.5	15.2	109.3	93	VI
9/30/98	673	2.0-2.5	14.6	113.4	95	VII
9/30/98	674	1.0-1.5	16.5	114.2	94	III
9/30/98	675	0.5-1.0	16.3	111.8	92	III
9/30/98	676	0.5-1.0	15.9	108.7	92	VI
9/30/98	677	5.0-5.5	10.1	116.3	92	XIII
9/30/98	678	4.0-4.5	9.3	115.3	91	XIII
9/30/98	679	2.5-3.0	11.3	116.8	93	XIII
9/30/98	680	0.5-1.0	16.6	109.8	93	VI
10/1/98	681	4.0-4.5	14.5	104.8	94	II
10/1/98	682	4.0-4.5	14.9	105.3	94	II

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
10/1/98	683	4.0-4.5	16.1	103.3	94	I
10/1/98	684	7.0-7.5	14.8	102.8	92	II
10/1/98	685	3.0-3.5	17.2	110.9	92	III
10/1/98	686	2.0-2.5	15.1	111.2	93	VII
10/2/98	687	9.0-9.5	15.5	110.8	95	VIII
10/2/98	688	5.0-5.5	14.3	105.0	94	II
10/2/98	689	3.5-4.0	15.1	99.9	91	I
10/2/98	690	3.0-3.5	15.2	109.4	92	VII
10/2/98	691	6.0-6.5	14.8	109.8	92	VII
10/2/98	692	8.0-8.5	16.6	111.5	92	III
10/2/98	693	6.0-6.5	15.0	109.6	92	VII
10/2/98	694	4.0-4.5	14.8	108.9	92	VII
10/2/98	695	1.0-1.5	16.6	112.3	93	III
10/2/98	696	5.0-5.5	14.9	111.4	94	VII
10/2/98	697	3.0-3.5	12.3	115.8	93	XI
10/2/98	698	2.0-2.5	15.5	112.6	95	VII
10/5/98	699	5.0-5.5	15.3	99.7	89	II
10/5/98	699A**	5.0-5.5	14.8	106.3	95	II
10/5/98	700	8.0-8.5	17.2	106.7	95	II
10/5/98	701	6.0-6.5	16.2	107.6	90	VII
10/5/98	702	5.0-5.5	14.8	109.8	92	VII
10/5/98	703	4.0-4.5	16.6	108.9	90	III
10/5/98	704	3.0-3.5	14.2	109.5	92	VII
10/5/98	705	1.0-1.5	12.2	114.1	91	XI

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
10/5/98	706	1.0-1.5	16.6	107.2	91	VI
10/5/98	707	0.5-1.0	14.3	109.4	93	VI
10/5/98	708	0.5-1.0	14.5	110.0	92	VII
10/5/98	709	4.0-4.5	12.2	111.4	94	VII
10/6/98	710	3.0-3.5	14.9	105.3	94	II
10/6/98	711	4.0-4.5	15.3	99.7	91	I
10/6/98	712	1.5-2.0	15.0	102.6	92	II
10/6/98	713	2.0-2.5	14.5	103.1	92	II
10/6/98	714	4.0-4.5	11.7	114.6	92	XI
10/6/98	715	2.0-2.5	14.2	109.5	92	VII
10/6/98	716	2.0-2.5	16.8	107.0	91	VI
10/6/98	717	3.0-3.5	10.0	120.9	94	V
10/7/98	718	4.0-4.5	11.3	118.6	94	XIII
10/7/98	719	3.0-3.5	11.5	114.8	91	XIII
10/7/98	720	2.5-3.0	11.0	118.0	94	XIII
10/7/98	721	2.0-2.5	11.5	117.8	93	XIII
10/7/98	722	3.0-3.5	15.8	109.1	90	III
10/7/98	723	3.0-3.5	15.2	109.4	92	VII
10/7/98	724	3.0-3.5	15.5	112.6	95	VII
10/7/98	725	2.5-3.0	12.4	113.9	91	XI
10/7/98	726	1.0-1.5	17.2	108.4	92	VI
10/7/98	727	2.0-2.5	13.5	111.0	93	VII
10/8/98	728	2.0-2.5	14.1	105.2	94	II
10/8/98	729	2.5-3.0	13.5	110.1	91	IV

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
10/8/98	730	2.0-2.5	15.0	102.6	92	II
10/8/98	731	2.0-2.5	14.9	104.4	93	II
10/8/98	732	1.5-2.0	16.8	107.9	91	VII
10/8/98	733	0.5-1.0	15.1	111.2	93	VII
10/8/98	734	1.0-1.5	12.2	112.3	94	VII
10/8/98	735	1.0-1.5	14.2	112.1	94	VII
10/8/98	736	1.0-1.5	13.8	109.8	92	VII
10/12/98	737	0.5-1.0	14.8	111.5	94	VII
10/12/98	738	0.5-1.0	16.1	110.2	91	III
10/12/98	739	0.5-1.0	15.7	112.3	93	III
10/12/98	740	2.0-2.5	12.3	113.9	94	IV
10/12/98	741	2.0-2.5	15.2	109.3	93	VIII
10/12/98	742	0.5-1.0	12.5	115.3	92	XI
10/13/98	743	2.0-2.5	14.8	106.3	95	II
10/13/98	744	3.0-3.5	13.3	112.1	93	IV
10/13/98	745	2.0-2.5	15.1	104.3	93	II
10/13/98	746	2.0-2.5	17.3	98.0	83	VI
10/13/98	746A**	2.0-2.5	16.9	107.8	91	VI
10/13/98	747	1.5-2.0	16.1	109.4	90	III
10/13/98	748	1.5-2.0	15.7	110.6	91	III
10/13/98	749	1.5-2.0	14.6	111.7	94	VII
10/13/98	750	1.5-2.0	13.9	110.6	93	VII
10/14/98	751	8.0-8.5	15.8	111.3	95	VIII
10/14/98	752	8.0-8.5	15.5	108.2	93	VIII

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
10/14/98	753	7.0-7.5	17.2	107.5	91	VI
10/14/98	754	6.0-6.5	13.4	111.1	93	VII
10/14/98	755	4.0-4.5	14.1	110.4	93	VII
10/14/98	756	3.0-3.5	12.7	113.6	95	VII
10/15/98	757	3.0-3.5	16.5	107.3	91	VI
10/15/98	758	2.0-2.5	12.2	120.3	96	XI
10/15/98	759	4.0-4.5	15.3	110.1	94	VIII
10/15/98	760	2.0-2.5	13.1	111.4	94	VII
10/15/98	761	1.0-1.5	11.5	116.6	93	XIII
10/15/98	762	1.0-1.5	14.7	109.9	92	VIII
10/15/98	763	8.0-8.5	16.1	108.5	93	VIII
10/15/98	764	6.0-6.5	11.2	117.8	92	V
10/15/98	765	4.0-4.5	13.7	109.9	92	VII
10/16/98	766	6.0-6.5	15.2	108.5	93	VIII
10/16/98	767	6.0-6.5	15.8	108.8	93	VIII
10/16/98	768	5.0-5.5	16.1	105.9	91	VIII
10/16/98	769	4.0-4.5	13.4	110.2	93	VII
10/16/98	770	3.0-3.5	14.2	111.2	93	VII
10/16/98	771	2.0-2.5	16.3	110.0	91	III
10/16/98	772	1.0-1.5	15.1	108.6	91	VII
10/19/98	773	2.0-2.5	15.1	110.3	93	VII
10/19/98	774	0.5-1.0	16.8	109.6	91	III
10/19/98	775	11.5-12.0	13.9	114.1	94	IV
10/19/98	776	7.5-8.0	13.5	112.8	93	IV

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
10/19/98	777	10.0-10.5	10.0	113.6	91	XI
10/19/98	778	6.0-6.5	14.7	111.6	92	III
10/19/98	779	8.5-9.0	14.6	109.1	92	VII
10/19/98	780	7.0-7.5	13.8	109.8	92	VII
10/20/98	781	9.0-9.5	14.1	114.8	95	IV
10/20/98	782	8.0-8.5	13.3	111.3	92	IV
10/20/98	783	5.0-5.5	13.8	109.8	91	IV
10/20/98	784	3.0-3.5	15.0	104.3	93	II
10/21/98	785	6.0-6.5	13.8	109.8	92	VII
10/21/98	786	5.0-5.5	14.5	109.2	92	VII
10/21/98	787	5.0-5.5	20.4	91.3	91	XIV
10/21/98	788	4.0-4.5	22.2	91.6	92	XIV
10/21/98	789	7.5-8.0	13.2	110.4	88	XI
10/21/98	789A**	7.5-8.0	12.1	115.9	93	XI
10/21/98	790	7.5-8.0	14.2	110.3	93	VII
10/21/98	791	7.5-8.0	15.1	108.6	91	VII
10/21/98	792	5.5-6.0	19.9	94.2	94	XIV
10/21/98	793	5.0-5.5	19.2	91.4	91	XIV
10/21/98	794	4.5-5.0	21.4	92.2	92	XIV
10/21/98	795	4.0-4.5	18.8	90.0	90	XIV
10/21/98	796	5.0-5.5	20.1	90.7	91	XIV
10/21/98	797	3.5-4.0	20.7	91.2	91	XIV
10/21/98	798	4.0-4.5	19.9	94.2	94	XIV
10/21/98	799	4.0-4.5	19.7	92.7	93	XIV

TABLE II  
COMPACTION TEST RESULTS

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
10/21/98	800	3.5-4.0	20.0	90.3	90	XIV
10/21/98	801	3.5-4.0	17.7	89.2	89	XIV
10/21/98	801A**	3.5-4.0	19.5	92.8	93	XIV
10/21/98	802	3.0-3.5	10.6	117.5	93	XIII
10/22/98	803	3.0-3.5	19.1	105.3	94	XIV
10/22/98	804	4.0-4.5	20.4	91.1	91	XV
10/22/98	805	1.0-1.5	11.4	116.7	93	XIII
10/22/98	806	1.0-1.5	11.2	115.1	91	XIII
10/22/98	807	2.0-2.5	9.3	115.3	91	XIII
10/22/98	808	2.0-2.5	9.7	115.8	92	XIII
10/22/98	809	0.5-1.0	10.7	113.8	91	XVI
10/22/98	810	1.0-1.5	11.3	115.0	92	XVI
10/22/98	811	2.0-2.5	20.3	91.4	91	XIV
10/22/98	812	1.5-2.0	19.9	93.4	93	XIV
10/22/98	813	1.5-2.0	18.7	105.3	94	XV
10/22/98	814	1.0-1.5	19.0	101.7	91	XV
10/23/98	815	1.0-1.5	19.8	95.9	93	XVII
10/23/98	816	0.5-1.0	10.8	112.8	94	XVIII
10/23/98	817	1.0-1.5	10.3	111.5	93	XVIII
10/23/98	818	1.5-2.0	9.5	116.9	93	XIII
10/23/98	819	0.5-1.0	12.3	111.4	93	XVIII
10/23/98	820	2.0-2.5	11.2	110.6	92	XVIII
10/23/98	821	1.5-2.0	19.6	104.5	93	XV
10/24/98	822	2.0-2.5	8.6	113.2	91	XVI

TABLE II  
COMPACTION TEST RESULTS

Date of Test	Test No.	*Depth	Percent Moisture	Unit Wt. lbs./cu.ft.	Relative Compaction	Soil Type
10/24/98	823	1.0-1.5	10.4	113.3	91	XVI
10/24/98	824	1.0-1.5	12.2	114.6	92	XVI
10/26/98	825	2.5-3.0	20.8	95.6	92	XVII
10/26/98	826	2.5-3.0	19.7	92.7	90	XVII
10/26/98	827	7.0-7.5	18.1	105.8	95	XV
10/26/98	828	6.5-7.0	9.2	114.5	91	XIII
10/26/98	829	7.0-7.5	12.3	113.9	91	XI
10/26/98	830	6.0-6.5	19.6	96.2	93	XVII
10/26/98	831	5.0-5.5	20.1	95.8	93	XVII
10/26/98	832	5.5-6.0	20.3	93.9	94	XIV
10/26/98	833	4.5-5.0	16.3	104.9	91	XIX
10/26/98	834	4.5-5.0	17.1	106.7	93	XIX
10/26/98	835	3.5-4.0	17.7	91.7	92	XIV
10/26/98	836	4.5-5.0	19.9	95.9	93	XVII
10/27/98	837	4.0-4.5	9.7	115.8	93	XVI
10/27/98	838	4.0-4.5	18.3	102.3	91	XV
10/27/98	839	4.5-5.0	9.7	116.7	93	XIII
10/27/98	840	2.0-2.5	16.3	104.9	91	XIX
10/27/98	841	3.5-4.0	19.4	96.3	94	XVII
10/27/98	842	3.0-3.5	16.6	106.3	92	XIX
10/27/98	843	3.5-4.0	17.2	98.1	85	XIX
10/27/98	843A**	3.5-4.0	17.5	106.4	93	XIX
10/28/98	844	2.0-2.5	20.5	94.9	92	XVII
10/28/98	845	3.0-3.5	16.8	107.0	93	XIX

TABLE II  
COMPACTION TEST RESULTS

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
10/28/98	846	2.0-2.5	10.7	113.8	95	XVIII
10/28/98	847	2.5-3.0	19.4	96.3	94	XVII
10/28/98	848	1.0-1.5	11.1	115.2	92	XVI
10/28/98	849	1.5-2.0	14.3	107.6	94	XIX
11/2/98	850	2.0-2.5	19.6	96.8	94	XVII
11/2/98	851	2.0-2.5	14.8	105.4	92	XIX
11/2/98	852	2.0-2.5	20.1	95.8	93	XVII
11/2/98	853	2.0-2.5	11.2	110.6	92	XVII
11/3/98	854	1.0-1.5	17.8	97.8	95	XVII
11/3/98	855	1.0-1.5	11.7	107.9	86	XVIII
11/3/98	855A**	1.0-1.5	11.9	117.0	97	XVIII
11/3/98	856	2.0-2.5	19.0	98.3	96	XVII
11/4/98	857	1.0-1.5	21.0	98.6	96	XVII
11/4/98	858	0.0-0.5	12.6	105.3	92	XVIII
11/4/98	859	0.0-0.5	19.9	96.7	94	XVII
11/4/98	860	0.0-0.5	18.7	94.2	92	XVII
11/4/98	861	0.0-0.5	16.2	97.8	95	XVII
11/4/98	862	0.0-0.5	17.3	105.7	92	XIX
11/5/98	863	0.0-0.5	15.0	106.5	93	XIX
11/5/98	864	0.0-0.5	16.3	109.2	95	XIX
11/5/98	865	0.0-0.5	14.6	104.9	91	XIX
11/5/98	866	0.0-0.5	15.4	105.0	91	XIX
11/5/98	867	0.0-0.5	13.8	108.9	95	XIX
11/5/98	868	0.0-0.5	14.2	105.4	90	XIX

**TABLE II**  
**COMPACTION TEST RESULTS**

<u>Date of Test</u>	<u>Test No.</u>	<u>*Depth</u>	<u>Percent Moisture</u>	<u>Unit Wt. lbs./cu.ft.</u>	<u>Relative Compaction</u>	<u>Soil Type</u>
11/5/98	869	0.0-0.5	16.6	104.1	92	XIX
11/6/98	870	2.0-2.5	12.9	108.0	94	XIX
11/6/98	871	2.0-2.5	15.6	108.9	95	XIX
11/6/98	872	4.0-4.5	15.3	106.6	93	XIX
11/6/98	873	4.0-4.5	16.2	105.8	92	XIX
11/6/98	874	6.0-6.5	15.8	107.9	94	XIX
11/6/98	875	6.0-6.5	17.0	105.9	92	XIX
11/6/98	876	4.0-4.5	15.6	103.9	90	XIX
11/6/98	877	2.0-2.5	15.3	104.7	91	XIX
11/6/98	878	0.0-0.5	20.6	96.3	91	XVII
11/6/98	879	0.0-0.5	15.6	104.6	91	XIX
11/6/98	880	0.0-0.5	16.1	107.3	94	XIX
11/6/98	881	0.0-0.5	16.5	113.6	94	III
11/6/98	882	0.0-0.5	17.3	111.0	92	III
11/6/98	883	0.0-0.5	17.0	107.9	90	II
11/6/98	884	0.0-0.5	16.9	108.6	91	III

\*Depth below finish grade (in feet)

\*\*Retest of failing tests after area reworked

# NorCal Engineering

Soils and Geotechnical Consultants  
10641 Humbolt Street Los Alamitos, CA 90720  
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CITY OF LOS ANGELES  
DEPARTMENT OF BUILDING AND SAFETY  
ENGINEER'S CERTIFICATE OF COMPLIANCE FOR COMPACTED EARTH FILLS

JOB DESCRIPTION: Harbor Gateway bet. 190<sup>th</sup> and 203<sup>rd</sup> St., Los Angeles

Legal Description: Tract No. 52172

SOIL TESTING AGENCY: NorCal Engineering

PROPERTY OWNER'S NAME:

OWNER'S ADDRESS:

PER REPORTS ON OUR PROJECT NUMBER: 5936-96

DATE OF WORK STARTED ON PROJECT: 6/18/98

DATE FILL WAS COMPLETED: 11/6/98

DATE OF THIS CERTIFICATE: 6/1/99

TO THE SUPERINTENDENT OF BUILDING:

I hereby certify that I have personally inspected and tested the placing of compacted earth fill on the above described property, and on the basis of these inspections and tests it is my opinion that the same was placed in conformity with the requirements of the Los Angeles City Building Code.



\*For the purpose of this certificate, to have "personally inspected and tested" shall include inspection and testing performed by any person responsible to the licensed engineer signing this certificate. Where the inspection and testing of all or part of the work above is delegated, full responsibility shall be assumed by the licensed engineer whose signature is affixed thereon.